LIMITED WARRANTY

This product is warranted to the original consumer purchaser to be free from defects in materials and workmanship under normal installation, use and service for a period of one (1) year from the date of purchase as shown on the purchaser's receipt.

The obligation of Rolls Corporation under this warranty shall be limited to repair or replacement (at our option), during the warranty period of any part which proves defective in material or workmanship under normal installation, use and service, provided the product is returned to Rolls Corporation, TRANSPORTATION CHARGES PREPAID. Products returned to us or to an authorized Service Center must be accompanied by a copy of the purchase receipt. In the absence of such purchase receipt, the warranty period shall be one (1) year from the date of manufacture.

This warranty shall be invalid if the product is damaged as a result of defacement, misuse, abuse, neglect, accident, destruction or alteration of the serial number, improper electrical voltages or currents, repair, alteration or maintenance by any person or party other than our own service facility or an authorized Service Center, or any use violative of instructions furnished by us.

This one-year warranty is in lieu of all expressed warranties, obligations or liabilities. ANY IMPLIED WARRANTIES, OBLIGATIONS, OR LIABILITIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED IN DURATION TO THE ONE YEAR DURATION OF THIS WRITTEN LIMITED WARRANTY. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

IN NO EVENT SHALL WE BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, WHATSOEVER. Some states do not allow the exclusion or limitation of special, incidental or consequential damages so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

RM82 MicLine Mixer
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ROLLS CORPORATION
SALT LAKE CITY, UTAH
6/04

ROLLS

RM82
MIC LINE MIXER
Eight Channel Audio Mixer

OWNERS MANUAL

INTRODUCTION

Thank your for your purchase of the Rolls RM82 Mic Line eight channel audio mixer. It is intended for sound reinforcement or studio applications where several microphones or line sources need to be combined to a single output. Please review this manual for proper operation.

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BACK COVER	WARRANTY

FEATURES:

- 8 XLR Mic inputs
- 8 1/4” unbalanced line inputs which may be internally jumpered to be Inserts, or Direct Outputs.
- Individual phantom power switches for each channel
- Front panel Trim and Tone controls
- RCA Aux/Bus input and pre-master output for cascading units or recording
- Balanced XLR output

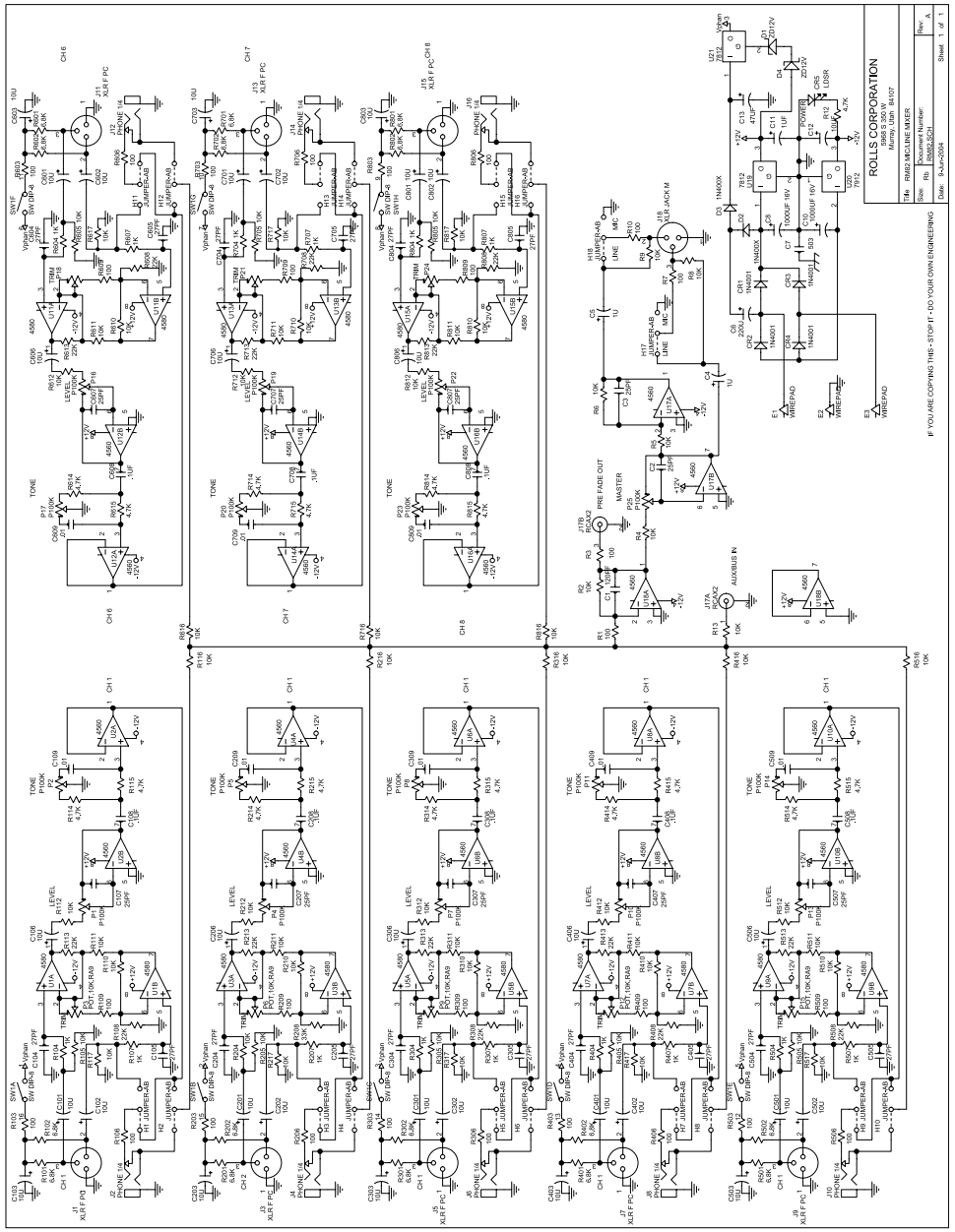
INSPECTION

1. Unpack and inspect the RM82 box and package.
If obvious physical damage is noticed, contact the carrier immediately to make a damage claim. We suggest saving the shipping carton and packing materials for safely transporting the unit in the future.
2. Please visit our website at **www.rolls.com** and register your warranty at the “Register Your Warranty Here” text, or complete the Warranty Registration Card and return it to the factory.

SPECIFICATIONS

Input Impedance:	Mic:	10K Ω XLR balanced
	1/4":	20K Ω unbalanced
	Bus Input:	10K Ω unbalanced
Max Input Level:	Mic:	0 dBV balanced
	Line:	+6 dBV
Input Connectors:	8: XLR, 8: 1/4" (Line), 1: RCA (Bus input)	
Outputs:	XLR bal., RCA unbalanced Prefade out	
Max Gain:	Mic:	55 dB
	Line:	26 dB
Tone Control:	12 dB Treble/Bass cut	
Phantom Power:	+48 VDC	
Output Level:	+22 dBV max	
Output Impedance:	51 Ω	
Phase Shift:	<10 degrees, 20Hz to 20 kHz	
Max S/N ratio:	106 dB	
THD:	<.01%	
CMRR:	>52 dB (Mic)	
Size:	19" x 1.75" x 6"	
	(48.3 x 4.5 x 15 cm)	
Weight:	7 lbs. (3 kg)	

DIP SWITCH DEFAULT SETTING:	ALL OFF
JUMPER DEFAULT SETTING:	1/4” JACKS AS INPUT
	MAIN OUTPUT AS LINE



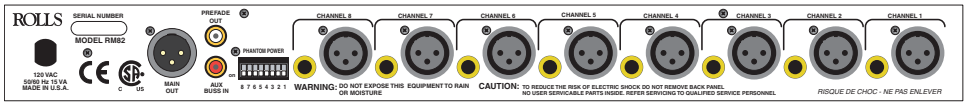
FRONT PANEL

NOTE: Descriptions for Channels 1 - 8 are identical.

TRIM: Adjusts the sensitivity of the XLR Microphone Inputs.
LEVEL: Adjusts the level of signal in the channel from off to +20 dB of gain.
TONE:Cuts the signal up to 12 dB, below 200 Hz when turned clockwise, or above 6 kHz when turned counter-clockwise.

MASTER LEVEL: Adjusts the Main Output signal level.
pwr: LED indicating power is applied to the RM82.
Power Switch: Applies power to the unit. Please ensure the power cable is connected to a properly grounded AC outlet.

REAR PANEL



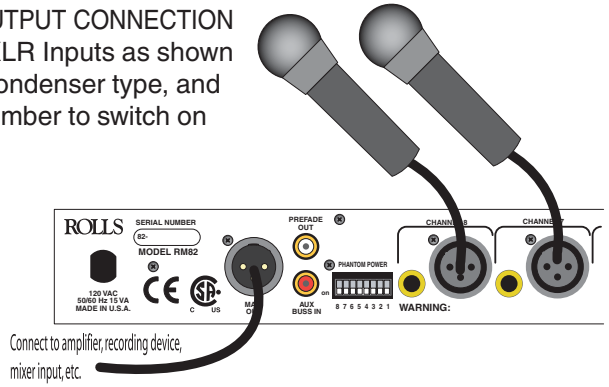
MAIN OUTPUT: XLR balanced jack containing the RM82 main output signal.
PRE-FADE OUTPUT: RCA jack for connection to another RM81 Aux/Bus Input or to another device such as a recorder.
AUX INPUT: RCA jack which connects directly to the RM81 mix bus. The jack may be connected to another RM81 Pre-Fade Output - making this unit the “Master”.
PHANTOM POWER SWITCHES: 8 individual DIP switches for applying 48 Volts of phantom power to the indicated channel’s XLR Input. The phantom power is for powering condenser microphones. The Phantom Power switches are in the OFF position when the RM82 is shipped from the factory.
CHANNEL INPUTS 1 - 8: 1/4” TS unbalanced, and XLR balanced input jacks. The eight 1/4” jacks come from the factory configured as line inputs and are electrically mixed with the XLR jacks. They may be used together if desired. These inputs may be reconfigured as either Direct Outputs, or Inserts. See page 4 for details.

A NOTE ABOUT ROLLS MICROPHONE PREAMPLIFIER CIRCUITS

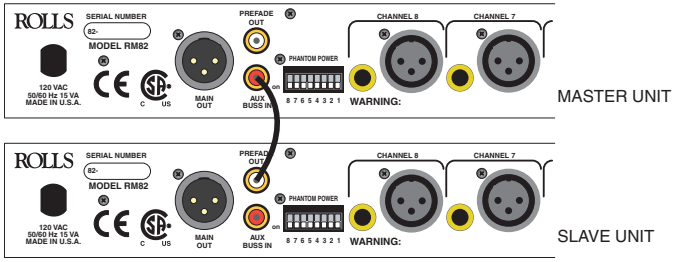
The Rolls servo-balanced Microphone Preamps feature many advantages over other mic preamps. Among these are simplicity of design, 40db or higher CMRR (common mode rejection ratio) than transistor input mic preamps. This means much lower noise on long input lines, and very low distortion at high gain. Discrete transistor preamps are non-linear at high gains, but not our design. We feature a higher signal swing, which means our preamps have more headroom before clipping.

1. MICROPHONE AND MAIN OUTPUT CONNECTION

Connect microphones to the XLR Inputs as shown here. If the microphones are condenser type, and require phantom power - remember to switch on (down) the corresponding Phantom Power switch.
Connect the Output to the next device in your signal chain.

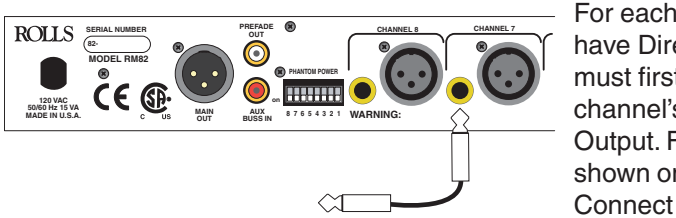


2. CONNECTING TWO RM82 UNITS TOGETHER



Using a single RCA cable, connect from the Pre-Fader Output of the “Slave” unit to the Aux Bus input of the “Master” unit. This “Master” unit’s Master Level control will now adjust the overall level of both units.

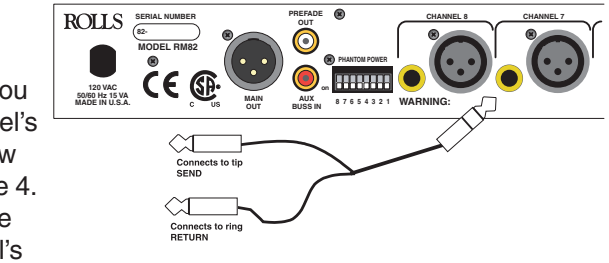
3. CHANNEL DIRECT OUTPUT



For each channel you wish to have Direct Output access, you must first configure that channel’s 1/4” Input as a Direct Output. Follow the instructions shown on page 4.
Connect a 1/4” unbalanced Tip-Sleeve cable to the channel’s 1/4” jack and to the next device you want the signal sent to. Note, the channel’s signal will still be present at the RM82 Main Output.

4. CHANNEL INSERT

For each channel you wish to have the ability to insert into, you must first configure that channel’s 1/4” Input as an INSERT. Follow the instructions shown on page 4.
Connect a 1/4” Tip-Ring-Sleeve INSERT cable into the channel’s 1/4” jack, and to the processor or other device you want the signal connected to.

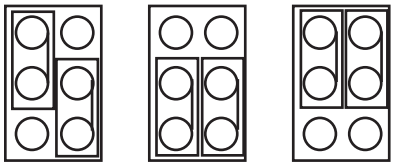


CONFIGURING THE 1/4” INPUT JACKS AS DIRECT OUTPUTS

The eight 1/4” Input jacks come from the factory configured as line inputs and are electrically mixed with the XLR jacks. They may be used together if desired. To configure a channel’s 1/4” jack as a Direct Out, first remove the RM81 lid. For each channel there are dual three-pin headers with shorting jumper on two pins. The setting from the factory is on “IN”. By moving the shorting jumpers to the configuration shown as “OUT” (one jumper up, the other down), the jack then becomes a Direct Output.

CONFIGURING THE 1/4” INPUT JACKS AS INSERTS

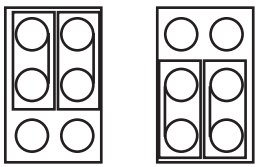
To configure a channel’s 1/4” jack as an Insert, first remove the RM82 lid and locate the corresponding channel’s dual three-pin header. Move both shorting jumpers down as shown below as “INSRT”, the jack then becomes an Insert.



Direct Output **Insert** **Input**

CONFIGURING THE OUTPUT FOR MIC OR LINE LEVEL

The RM82 ships from the factory with the XLR Main Output configured as Line Level (+4 dB). To change this to Mic Level (-10 dB), carefully remove the lid, locate the Mic/Line header which is near the Main Output jack. Move the two jumpers from the Line Level position (shown below on the right), to the Mic Level position (shown on the left).



Mic Level **Line Level**

JUMPER DEFAULTS

The internal jumpers are configured from the factory as follows:
1/4” = INPUTS
MAIN OUT LEVEL = LINE LEVEL